Gloria R. Farrell
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Dwayne Breger, Ph.D.
Director, Renewable and Alternative Energy Development
Massachusetts Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Dear Dr. Berger,

Please accept this letter as my Public Comment regarding the Manomet Study and RPS Policy Directives discussed at the open hearing at Holyoke Community College.

I am a 29 year resident of Russell, Ma. When I first learned of the proposed Russell Biomass plant I was an opponent of it for potential environmental impact reasons. But my husband pointed out to me the financial and other benefits it would create for our town. After listening to his perspective, I had to investigate both sides of the issue for myself to see which one of us was on the right track.

I attended meetings, listened to comments, asked questions, and looked at the financial and environmental impact studies. I then became a supporter of the Russell Biomass project, joining half of the voting public in Russell. I believe that the plant design and all the specifics are being held to the highest expectations of all the DPU, DEP, and EPA standards, which are some of the strictest in the nation.

Russell has such an opportunity that may never come again. With our current economy in crisis, it is imperative that we must strive to find every possible way to make this project work.

I have read both the Manomet Study on Biomass Sustainability and Carbon Accounting Summary and the directive letter from Secretary Ian Bowles to Commissioner Guidice of the DOER. **Both** pieces **openly** state that the Manomet "study **does not** provide in-depth analysis of carbon accounting for residual forest products … or clean wood waste" [Russell Biomass fuel] "though the study suggests that use of such biomass fuels would reduce green house gas emissions over the relevant timescale of the GWSA…". This fact is very important.

Please make careful considerations of the Russell Biomass plans for burning clean waste wood. Using clean waste wood will release the same amount of CO2 as the same waste wood left to decay on the forest floor or piled at our dumps. The CO2 will be re-absorbed by the standing trees and plants. It would also reduce the levels of methane coming from the decaying wood. (This point does not seem to be addressed in the study.) Using the well-regulated forestry practices of the state, Russell Biomass would help the forestry industry by disposing of waste wood that is not commercially usable, allowing the forest to regenerate healthy and commercially viable trees. It also helps by removing debris hazardous as fuel for forest fires.

Both the U.S. Environmental Protection Agency (www.epa.gov/cleanenergy/energy-and-you/affect/non-hydro.html#footnotes) and the U.S. Energy Information Administration

(www.eia.doe.gov/oiaf/analysispaper/biomass) state in these documents that biomass is "clean" and "renewable". Fossil fuels are not. For environmental and economical reasons most agree we must move away from these sources. Biomass is one piece of the answer. It should be added to the mix of other renewable sources.

Western Massachusetts Electric Company provides information quarterly to customers titled "Electricity Facts for Basic Service".

http://nuwnotes1.nu.com/apps/wmeco/webcontent.nsf/0/6e3e16c9ba123533852577520052921 8/$File/7_10%20Default%20Service%20insert.pdf

One portion of this information gives the definitions of the emissions from the production of their electricity as follows:

"Carbon Dioxide (CO2) is released when fossil fuels (e.g., coal, oil and natural gas) are burned."

"Nitrogen Oxides (NOx) form when fossil fuels and biomass are burned at high temperatures."

"Sulfur Dioxide (SO2) is formed when fuels containing sulfur are burned, primarily coal and oil."

My point here is that WMECO did not include biomass in its definition of Carbon Dioxide emissions. Perhaps they also consider biomass to be a carbon neutral renewable energy as well.

Another piece of information provided by WMECO in the document breaks down their power supply by sources. My document shows as follows:

Fossil fuel =56.9%. Renewable [by US government definition] =7.26% Other =35.85%

Coal 12.43%.	Biomass 3.11%	Nuclear34.45%
Nat. gas 38.26%.	Hydro small 2.85%	Trash 1.40%
Oil 6.21%	Wind 1.4%	

Solar 0%

It would behoove us as a society so dependent on non-renewable and environmentally detrimental fossil fuels, to do all we can to find a way to move away from their use and promote economically viable renewable energy use, including biomass.

I am not a scientist. I am an educator. In my search of information to prepare this letter, I found an interesting article published in 1997 by the United Nations Environment Programme – World Meteorological Organization. The science concept presented in the article was one I have never heard addressed in the biomass controversy. The topic written about was the "atmospheric build-up of green house gases" (www.gcrio.org/ipcc/qa/05.html). Summarizing one point, it states that the nuclei of carbon atoms in CO2 emitted by burning fossil fuels "differ in the characteristics" from the nuclei of carbon atoms in CO2 emitted under natural conditions (i.e. biomass), thus causing a difference in the way the two varied types of carbon are emitted into the atmosphere and/or absorbed back into nature. I would hope that this scientific concept would be investigated in your study in order to leave no stone unturned when setting the standard required of you by Secretary Bowles.

Please, for the good of our town of Russell, the state of Massachusetts, and our country, please find a way to make burning biomass economically viable as a renewable energy resource.

Sincerely,
Gloria R. Farrell
Russell, MA